

Application No. 10/684,408
Amendment dated September 5, 2006
Reply to Office Action dated June 5, 2006

AMENDMENTS TO THE CLAIMS:

1. (currently amended) A MOSFET based, high voltage, high current AC electronic relay, comprising:

a MOSFET switching circuit selectively switching between switch conducting and switch isolation, wherein the MOSFET switching circuit includes first and second power MOSFETs and a depletion mode MOSFET;
a transformer arrangement electrically connected coupled to the MOSFET switching circuit, the transformer arrangement selectively applying a predetermined voltage to the MOSFET switching circuit which establishes the MOSFET switching circuit in switch conducting, the transformer arrangement including a primary winding connected to a first secondary winding and a second secondary winding, each of the first and second secondary windings are connected to a full bridge rectifier the output of which is coupled to the MOSFET switching circuit.
2. (currently amended) The electronic relay according to claim 1, further including an oscillator connected to the transformer arrangement.
3. (canceled)
4. (currently amended) The electronic relay according to claim [3] 1, wherein the depletion mode MOSFET is connected between gates and sources of the respective first and second power MOSFETs.

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5. (currently amended) The electronic relay according to claim [4] 1, further including a small signal MOSFET connected between gates and sources of the respective first and second power MOSFETs

6-19. (canceled)